



General

Guideline Title

Viral hepatitis in pregnancy.

Bibliographic Source(s)

American College of Obstetricians and Gynecologists (ACOG). Viral hepatitis in pregnancy. Washington (DC): American College of Obstetricians and Gynecologists (ACOG); 2007 Oct. 15 p. (ACOG practice bulletin; no. 86). [69 references]

Guideline Status

This is the current release of the guideline.

The American College of Obstetricians and Gynecologists (ACOG) reaffirmed the currency of this guideline in 2012.

Recommendations

Major Recommendations

The grades of evidence (I-III) and levels of recommendation (A-C) are defined at the end of the "Major Recommendations" field.

The following recommendations are based on good and consistent scientific evidence (Level A):

Routine prenatal screening of all pregnant women by hepatitis B surface antigen (HBsAg) testing is recommended.

Newborns born to hepatitis B carriers should receive combined immunoprophylaxis consisting of hepatitis B immune globulin (HBIG) and hepatitis B vaccine within 12 hours of birth.

Hepatitis B infection is a preventable disease, and all at-risk individuals, particularly health care workers, should be vaccinated. All infants should receive the hepatitis B vaccine series as part of the recommended childhood immunization schedule.

Breastfeeding is not contraindicated in women with hepatitis A virus (HAV) infection with appropriate hygienic precautions, in those chronically infected with hepatitis B if the infant receives HBIG passive prophylaxis and vaccine active prophylaxis, or in women with hepatitis C virus (HCV) infection.

The following recommendations are based on limited or inconsistent scientific evidence (Level B):

Routine prenatal HCV screening is not recommended; however, women with significant risk factors for infection should be offered antibody screening.

Route of delivery has not been shown to influence the risk of vertical HCV transmission, and cesarean delivery should be reserved for obstetric indications in women with HCV infection.

The following recommendations are based primarily on consensus and expert opinion (Level C):

The risk of transmission of hepatitis B associated with amniocentesis is low.

Susceptible pregnant women who are at risk for hepatitis B infections should be specifically targeted for vaccination.

Definitions:

Grades of Evidence

I Evidence obtained from at least one properly designed randomized controlled trial.

II-1 Evidence obtained from well-designed controlled trials without randomization.

II-2 Evidence obtained from well-designed cohort or case–control analytic studies, preferably from more than one center or research group.

II-3 Evidence obtained from multiple time series with or without the intervention. Dramatic results in uncontrolled experiments also could be regarded as this type of evidence.

III Opinions of respected authorities, based on clinical experience, descriptive studies, or reports of expert committees.

Levels of Recommendation

Level A — Recommendations are based on good and consistent scientific evidence.

Level B — Recommendations are based on limited or inconsistent scientific evidence.

Level C — Recommendations are based primarily on consensus and expert opinion.

Clinical Algorithm(s)

None provided

Scope

Disease/Condition(s)

Viral hepatitis during pregnancy, including:

Hepatitis A

Hepatitis B

Hepatitis C

Hepatitis D

Hepatitis E

Guideline Category

Diagnosis

Evaluation

Management

Prevention

Risk Assessment

Screening

Treatment

Clinical Specialty

Gastroenterology

Infectious Diseases

Obstetrics and Gynecology

Intended Users

Physicians

Guideline Objective(s)

To aid practitioners in making decisions about appropriate obstetric and gynecologic care

To describe the specific subtypes of hepatitis, their implications during pregnancy, the risk of perinatal transmission, and issues related to both treatment and prevention of infection

Target Population

Pregnant women

Interventions and Practices Considered

Recognition of clinical manifestations of hepatitis

General diagnostic tests

Serum transaminase levels

Serum bilirubin levels

Specific diagnostic/screening tests

Hepatitis A virus (HAV) immunoglobulin M (IgM) antibodies

Hepatitis B virus (HBV) surface antigen (HbsAg), HBV surface IgG antibody (anti-HBS)

Hepatitis C antibody (anti-HCV)

Hepatitis D virus (HDV) antigen in hepatic tissue, IgM antibody to HDV

Hepatitis E virus-specific antibodies

Referral of chronic hepatitis carriers to liver disease experts for treatment and management

Reporting to health departments

Routine prenatal screening of all pregnancy women for hepatitis B by HBsAg testing

Immunoprophylaxis of newborns born to hepatitis B carriers with hepatitis B immune globulin and hepatitis B vaccine

Vaccination of infants and at-risk individuals with hepatitis B vaccine, particularly health care workers.

Screening of at-risk pregnant women for HCV infection (routine screening considered but not recommended)

Considerations for amniocentesis, route of delivery and breastfeeding in women infected with hepatitis

Major Outcomes Considered

Incidence of viral hepatitis infections: hepatitis A, B, C, D, and E

Incidence of vertical perinatal transmission of viral hepatitis

Incidence of accidental exposure of healthcare workers

Methodology

Methods Used to Collect/Select the Evidence

Hand-searches of Published Literature (Primary Sources)

Hand-searches of Published Literature (Secondary Sources)

Searches of Electronic Databases

Description of Methods Used to Collect/Select the Evidence

2007 Guideline

The MEDLINE database, the Cochrane Library, and the American College of Obstetricians and Gynecologists' own internal resources and documents were used to conduct a literature search to locate relevant articles published between January 1985 and February 2007. The search was restricted to articles published in the English language. Priority was given to articles reporting results of original research, although review articles and commentaries also were consulted. Abstracts of research presented at symposia and scientific conferences were not considered adequate for inclusion in this document. Guidelines published by organizations or institutions such as the National Institutes of Health and the American College of Obstetricians and Gynecologists were reviewed, and additional studies were located by reviewing bibliographies of identified articles.

2012 Reaffirmation

Medline/Pubmed/Cochrane databases were searched for literature published from 2007-2012.

Number of Source Documents

Not stated

Methods Used to Assess the Quality and Strength of the Evidence

Weighting According to a Rating Scheme (Scheme Given)

Rating Scheme for the Strength of the Evidence

Studies were reviewed and evaluated for quality according to the method outlined by the U.S. Preventive Services Task Force:

I Evidence obtained from at least one properly designed randomized controlled trial.

II-1 Evidence obtained from well-designed controlled trials without randomization.

II-2 Evidence obtained from well-designed cohort or case-control analytic studies, preferably from more than one center or research group.

II-3 Evidence obtained from multiple time series with or without the intervention. Dramatic results in uncontrolled experiments also could be regarded as this type of evidence.

III Opinions of respected authorities, based on clinical experience, descriptive studies, or reports of expert committees.

Methods Used to Analyze the Evidence

Systematic Review

Description of the Methods Used to Analyze the Evidence

Not stated

Methods Used to Formulate the Recommendations

Expert Consensus

Description of Methods Used to Formulate the Recommendations

2007 Guideline

Analysis of available evidence was given priority in formulating recommendations. When reliable research was not available, expert opinions from obstetrician–gynecologists were used. See also the "Rating Scheme for the Strength of Recommendations" field regarding Grade C recommendations.

2012 Reaffirmation

A committee member reviewed the document and new literature search on the topic. The document was then reviewed by the committee and the committee agreed that it is current and accurate.

Rating Scheme for the Strength of the Recommendations

Based on the highest level of evidence found in the data, recommendations are provided and graded according to the following categories:

Level A — Recommendations are based on good and consistent scientific evidence.

Level B — Recommendations are based on limited or inconsistent scientific evidence.

Level C — Recommendations are based primarily on consensus and expert opinion.

Cost Analysis

Published cost analyses were of screening and vaccinating for viral hepatitis were reviewed.

Method of Guideline Validation

Internal Peer Review

Description of Method of Guideline Validation

Practice Bulletins are validated by two internal clinical review panels composed of practicing obstetrician–gynecologists generalists and sub-specialists. The final guidelines are also reviewed and approved by the American College of Obstetricians and Gynecologists (ACOG) Executive Board.

Evidence Supporting the Recommendations

Type of Evidence Supporting the Recommendations

The type of supporting evidence is identified and graded for each recommendation (see "Major Recommendations").

Benefits/Harms of Implementing the Guideline Recommendations

Potential Benefits

Accurate diagnosis and appropriate treatment and management of viral hepatitis in pregnant women

Potential Harms

Not stated

Contraindications

Contraindications

The use of ribavirin is contraindicated in pregnancy.

Qualifying Statements

Qualifying Statements

These guidelines should not be construed as dictating an exclusive course of treatment or procedure. Variations in practice may be warranted based on the needs of the individual patient, resources, and limitations unique to the institution or type of practice.

Implementation of the Guideline

Description of Implementation Strategy

An implementation strategy was not provided.

Implementation Tools

Audit Criteria/Indicators

Foreign Language Translations

Patient Resources

For information about availability, see the *Availability of Companion Documents* and *Patient Resources* fields below.

Institute of Medicine (IOM) National Healthcare Quality Report Categories

IOM Care Need

Getting Better

Living with Illness

Staying Healthy

IOM Domain

Effectiveness

Identifying Information and Availability

Bibliographic Source(s)

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Adaptation

Not applicable: The guideline was not adapted from another source.

Date Released

2007 Oct (reaffirmed 2012)

Guideline Developer(s)

American College of Obstetricians and Gynecologists - Medical Specialty Society

Source(s) of Funding

American College of Obstetricians and Gynecologists (ACOG)

Guideline Committee

American College of Obstetricians and Gynecologists (ACOG) Committee on Practice Bulletins - Obstetrics

Composition of Group That Authored the Guideline

Not stated

Financial Disclosures/Conflicts of Interest

Not stated

Guideline Status

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The American College of Obstetricians and Gynecologists (ACOG) reaffirmed the currency of this guideline in 2012.

Guideline Availability

Electronic copies: None available

Print copies: Available for purchase from the American College of Obstetricians and Gynecologists (ACOG) Distribution Center, PO Box 933104, Atlanta, GA 31193-3104; telephone, 800-762-2264, ext. 192; e-mail: sales@acog.org. The ACOG Bookstore is available online at the [ACOG Web site](#) .

Availability of Companion Documents

Proposed performance measures are included in the original guideline document.

Patient Resources

The following are available:

- Hepatitis B virus in pregnancy. Atlanta (GA): American College of Obstetricians and Gynecologists (ACOG); 2008. Available from the [American College of Obstetricians and Gynecologists \(ACOG\) Web site](#) . Copies are also available in Spanish.
- Protecting yourself against hepatitis B. Atlanta (GA): American College of Obstetricians and Gynecologists (ACOG); 1998. Available from the [American College of Obstetricians and Gynecologists \(ACOG\) Web site](#) . Copies are also available in Spanish.

Print copies: Available for purchase from the American College of Obstetricians and Gynecologists (ACOG) Distribution Center, PO Box 933104, Atlanta, GA 31193-3104; telephone, 800-762-2264, ext. 192; e-mail: sales@acog.org. The ACOG Bookstore is available online at the [ACOG Web site](#) .

Please note: This patient information is intended to provide health professionals with information to share with their patients to help them better understand their health and their diagnosed disorders. By providing access to this patient information, it is not the intention of NGC to provide specific medical advice for particular patients. Rather we urge patients and their representatives to review this material and then to consult with a licensed health professional for evaluation of treatment options suitable for them as well as for diagnosis and answers to their personal medical questions. This patient information has been derived and prepared from a guideline for health care professionals included on NGC by the authors or publishers of that original guideline. The patient information is not reviewed by NGC to establish whether or not it accurately reflects the original guideline's content.

NGC Status

This NGC summary was completed by ECRI Institute on July 30, 2008. The information was verified by the guideline developer on August 20, 2008. The currency of the guideline was reaffirmed by the developer in 2012 and this summary was updated by ECRI Institute on November 16, 2012.

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